## REMARKS

In a Final Office Action mailed on September 21, 2005, claims 1 and 37-71 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Roy in view of Hsu. It is noted that although the Examiner refers to claim 1 in the latest rejections, claim 1 was cancelled in the last reply. Therefore, the § 103(a) rejections of claims 37-71 are addressed below.

## § 103 Rejections of Claims 37-42:

In order to establish a prima facie case of obviousness, the prior art must teach or suggest all claim limitations (emphasis added). M.P.E.P. § 2143.03. As previously pointed out, the hypothetical combination of Roy and Hsu fails to teach or suggest all claim limitations and thus, for at least this reason, a prima facie case of obviousness has not been established for independent claim 37.

More specifically, neither Roy nor Hsu teaches or suggests the combination of performing a column redundancy check and synchronizing the beginning of an internal write operation to a memory cell array of a memory device to a clock signal. In the latest Office Action, the Examiner contends that Roy allegedly clearly discloses synchronizing a data transfer to a clock signal. While this may be true, as previously pointed out, Roy fails to teach or suggest synchronizing the beginning of an internal write operation to a memory cell array of a memory device to a clock signal, as Roy is directed to synchronizing a data transfer across a boundary. Thus, the cited language has no relevance regarding the synchronization of an internal write operation to a memory cell array of a memory device to a clock signal (emphasis added). Hsu fails to teach or suggest the missing claim limitations. Therefore, for at least these reasons, a prima facie case of obviousness has not been established for independent claim 37.

Claims 38-42 are patentable for at least the reason that these claims depend from an allowable claim; and therefore, withdrawal of the § 103(a) rejections of claims 37-42 is requested.

## § 103 Rejections of Claims 43-51:

The method of independent claim 43 recites performing a column redundancy check prior to the initiation of the providing of column select signals that are indicative of a column address to a memory cell array of a memory device.

In the latest Office Action, the Examiner refers to Roy for the general teaching of providing column select signals and relies on Hsu for allegedly teaching or suggesting performing a column redundancy check prior to the initiation of the providing of the column select signals. In essence, the Examiner is contending that Hsu somehow implies that the column redundancy is initiated prior to the providing of column select signals. However, the Examiner provides no support for this reasoning. Therefore, pursuant to M.P.E.P. § 2143.03, Applicant requests the Examiner to show where the prior art teaches or suggests the claim limitations. Without such a showing, a *prima facie* case of obviousness has not been established for independent claim 43.

Claims 44-51 are patentable for at least the reason that these claims depend from an allowance claim. Therefore, for at least the reasons that are set forth above, withdrawal of the § 103(a) rejections of claims 43-51 is requested.

# § 103 Rejections of Claims 52-57:

For at least the same reasons that are set forth above for independent claim 37, the hypothetical combination of Roy and Hsu fails to teach or suggest all claim limitations. Therefore, for at least this reason, a *prima facie* case of obviousness has not been set forth for independent claim 52. In particular, the hypothetical combination of Roy and Hsu fails to teach or suggest a circuit to synchronize an initiation of an internal write operation to a memory cell array of a memory device with a clock signal. Therefore, for at least the reason that a *prima* facie case of obviousness has not been established for independent claim 53, withdrawal of the § 103 rejections of claims 53-57 is requested.

#### § 103 Rejections of Claims 58-64:

A prima facie case of obviousness of has not been established for independent claim 58 for at least the reason that the Examiner fails to show where the prior art teaches or suggests a control circuit that performs a column redundancy check during a delay to accommodate

variations in the timing of a data strobe signal. In this regard, the Examiner still fails to establish why one skilled in the art would have modified Roy in view of Hsu so that Roy's memory system performs a column redundancy check while one or more of its CLKIN pulses are occurring. On page 3 of the Final Office Action, the Examiner states that the general motivation to combine Roy and Hsu is due to both references allegedly being related to timing and clock operations in a memory device. However, the general combination of Roy and Hsu does not specifically teach all the limitations of independent claim 58. Therefore, a *prima facie* case of obviousness has not been established for claim 58 for at least the reason that the Examiner fails to show where the combination of Roy and Hsu teaches or suggests all claim limitations. M.P.E.P. § 2143.03.

Claims 59-64 are patentable for at least the reason that these claims depend from an allowable claim. Therefore, for at least the reasons that are set forth above, withdrawal of the § 103(a) rejections of claims 58-64 is requested.

## § 103 Rejections of Claims 65-71:

The computer system of independent claim 65 includes a memory device that is coupled to a memory bus and is adapted to establish a predetermined window of time to capture data and perform a column redundancy check in response to the memory operation during the predetermined window of time.

A prima facie case of obviousness has not been established for independent claim 65 for at least the reason that the prior art fails to teach or suggest the memory device of claim 65. In particular, the Office Action fails to show why one skilled in the art would have modified Roy in view of Hsu to perform a column redundancy check during an alleged holding time to hold bytes within a data input unit 178 for a period of time before sending the data for synchronization of the I/O write operation with the column select signal 181. Thus, there has been no showing of why one skilled in the art would have performed a column redundancy check during this holding time. Therefore, a prima facie case of obviousness has not been established for independent claim 65.

Claims 66-71 are patentable for at least the reason that these claims depend from an allowance claim; therefore, for at least the reasons that are set forth above, withdrawal of the § 103 rejections of claims 65-71 is requested.

# **CONCLUSION**

In view of the foregoing, withdrawal of the § 103 rejections and a favorable action in the form of a Notice of Allowance are requested. The Commissioner is authorized to charge any additional fees, or credit any overpayment to Deposit Account No. 20-1504 (MCT.0047C1US).

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